

ORIGINAL

DOCKET FILE COPY ORIGINAL

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

RECEIVED

JAN 27 1999

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )

Communications Assistance for )  
Law Enforcement Act )

CC Docket No. 97-213

**REPLY COMMENTS OF AT&T CORP.  
REGARDING FURTHER NOTICE OF  
PROPOSED RULEMAKING ON CALEA CAPABILITIES**

Mark C. Rosenblum  
Stephen C. Garavito  
AT&T Corp.  
Room 3252G1  
295 North Maple Avenue  
Basking Ridge, New Jersey 07920  
(908) 221-8100

Douglas I. Brandon  
Roseanna DeMaria  
AT&T Wireless Services, Inc.  
Fourth Floor  
1150 Connecticut Avenue  
Washington, D.C. 20036  
(202) 223-9222

Dated: January 27, 1999

No. of Copies rec'd 014  
List ABCDE

## **TABLE OF CONTENTS**

	SUMMARY.....	1
I.	SECTION 107(b) FACTORS.....	2
	A. DOJ's Cost Comparison Argument is Wrong.....	4
	B. The Entire Cost of JSTD-025 Must Be Considered.....	5
II.	REASONABLE TIME AND CONDITIONS FOR COMPLIANCE.....	8
	CONCLUSION.....	10

### **APPENDIX A COST INFORMATION FROM COMMENTS**

Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

RECEIVED

JAN 27 1999

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )  
 )  
Communications Assistance for ) CC Docket No. 97-213  
Law Enforcement Act )

To: The Commission

**REPLY COMMENTS OF AT&T CORP.  
REGARDING FURTHER NOTICE OF  
PROPOSED RULEMAKING ON CALEA CAPABILITIES**

On November 5, 1998, the Commission released a Further Notice of Proposed Rulemaking (the "FNPRM") seeking comment on its proposal to add, not add, or delete certain surveillance capabilities to or from JSTD-025, the industry "safe harbor" surveillance standard.<sup>1</sup> AT&T Corp. and AT&T Wireless Services, Inc. ("AWS") (collectively "AT&T"), submitted comments urging the Commission not to add the enhanced surveillance features sought by the Federal Bureau of Investigation ("FBI") and the Department of Justice ("DOJ") -- a position uniformly supported by all commenters in this proceeding other than the DOJ and FBI (and the law enforcement agencies it represents).

**SUMMARY**

In these FNPRM Reply Comments, AT&T does not revisit the arguments concerning the tentative conclusions reached by the Commission in the FNPRM regarding DOJ's so-called "punch list" capabilities. The Commission has received a wide array of legal and technical analysis from a broad cross-section of industry, privacy groups, and the FBI/DOJ. The

---

<sup>1</sup> *In the Matter of Communications Assistance for Law Enforcement Act*, CC Docket No. 97-213, *Further Notice of Proposed Rulemaking* (adopted Oct. 22, 1998, released Nov. 5, 1998).

overwhelming consensus against adoption of the FBI enhanced surveillance demands convincingly establishes they should be rejected.

AT&T does, however, address the wide divergence of views between industry and DOJ regarding interpretation of the Section 107(b) factors. Although the plain language of CALEA gives the Commission the discretion not to require any capability that fails to satisfy any one of the Section 107 factors, DOJ believes that the Commission has no choice but to require all of the punch list capabilities, no matter the cost, no matter the effect on competition, no matter the impact on innovation and no matter that consideration of the public interest under CALEA must encompass more than just facilitating electronic surveillance. As AT&T demonstrates in these Reply Comments, DOJ simply is wrong in its interpretation of Section 107.

Finally, AT&T continues to support remand of any changes in the standard to the industry standards setting body. DOJ itself now admits that any changes in the standard should be handled by the drafters of JSTD-025, but the Commission should reject the severe constraints on the process advocated by the FBI.

#### **I. SECTION 107(b) FACTORS**

DOJ contends that the sole goal of CALEA is to "ensur[e] that law enforcement's ability to protect public safety and national security through lawful electronic surveillance is not frustrated."<sup>2</sup> But Congress established two other equally important goals that DOJ consistently ignores: protection of privacy and ensuring that the introduction of new technologies, features, and services is not impeded.<sup>3</sup>

---

<sup>2</sup> Department of Justice Comments Regarding Further Notice of Proposed Rulemaking ("DOJ FNPRM Comments") at 7.

<sup>3</sup> H.R. Rep. No. 103-827, 103d Cong., 2d Sess. (1994), *reprinted in* 1994 U.S.C.C.A.N. 3489 [hereinafter "House Report"].

In its zeal to promote the statutory objective it considers most important, DOJ attempts to circumscribe the Commission's authority under CALEA. DOJ contends that because the Commission has determined tentatively that some of the punch list items are within the scope of the Section 103 assistance capability requirements, the Commission must mandate those features be adopted at any cost. DOJ asserts that the Commission's task is not to determine *whether* but *how* to implement the punch list.

DOJ ignores the clear instructions of Congress. Speaking of the Commission's role under CALEA, Congress stated:

[I]f a service [or] technology cannot reasonably be brought into compliance with the interception requirements, then the service or technology can be deployed. This is the exact opposite of the original versions of the legislation, which would have barred introduction of services or features that could not be tapped.<sup>4</sup>

If the Commission has the greater power to permit the deployment of technology that cannot be wiretapped at all, it necessarily must have the power to permit deployment of technology that can be wiretapped fully but with fewer enhanced surveillance features.

Finally, reading the Section 107 factors out of the law completely, DOJ urges the Commission to gold-plate the standard with its enhanced features and derides the standards process that considers the varying circumstances of all industry members as leading to a "lowest common denominator" standard.<sup>5</sup> DOJ ignores its CALEA charge "to ensure the efficient and industry-wide implementation of the assistance capability requirements under section 103" through industry standard setting.<sup>6</sup> Moreover, nothing in Section 107(b) is

---

<sup>4</sup> House Report at 3499.

<sup>5</sup> DOJ FNPRM Comments at 8.

<sup>6</sup> 47 U.S.C. § 1006(a) (emphasis added). Under DOJ's view, when Congress used the word "ensure" in CALEA, it imposed obligations only on carriers and not the government. Thus, DOJ contends that carriers must create new features and capabilities like a surveillance status message to "ensure" all communications are intercepted, citing Section 103(a). Yet, adoption of DOJ's proposed, unaffordable, unachievable, gold-plated standard conflicts with its obligations to "ensure" industry-wide implementation of CALEA.

carrier-specific; rather, Congress painted the Section 107 factors with a broad brush and directed the Commission to consider impacts to the industry, to consumers and ratepayers, and to privacy in general.

**A. DOJ's Cost Comparison Argument is Wrong.**

DOJ argues that cost is relevant to the Commission's Section 107 proceedings only "in choosing among the alternatives" to meet compliance.<sup>7</sup> The force of DOJ's logic leads to the odd result that the Commission can promulgate a standard today that no one can afford and then deal with the consequences later on an individual carrier basis through Section 109 reasonable achievability petitions. With industry comments establishing a record in this proceeding that the cost of compliance with just the core features of JSTD-025 probably exceeds \$4 billion, such petitions are inevitable, perhaps even without the addition of a single punch list item.<sup>8</sup>

Even if DOJ is correct that cost is only relevant for comparison of feature alternatives, no such comparisons have been made in this proceeding. According to DOJ, there is only one possible way to implement the punch list – as defined in the DOJ proposed rule that accompanied its deficiency petition.<sup>9</sup> The FNPRM did not request comment on alternative means of implementing the punch list that are cheaper or more efficient. Thus, if DOJ's position is accepted, there is no record upon which the Commission can base any conclusion regarding whether the Section 107(b) factors are met.

---

<sup>7</sup> DOJ FNPRM Comments at 12.

<sup>8</sup> Cost information provided in comments is collected in Appendix A.

<sup>9</sup> Department of Justice and the Federal Bureau of Investigation Joint Petition for Expedited Rulemaking, filed March 27, 1998, at 25 ("In some instances, the capabilities missing from the interim standard can be implemented only in one way."). Even if DOJ were correct, the Commission has recognized that developing standards for similarly situated carriers in an omnibus proceeding promotes administrative efficiency and avoids undue burden on industry. See *Petition for the Extension of the Compliance Date under Section 107 of the Communications Assistance for Law Enforcement Act by AT&T Wireless Services, Inc., Lucent Technologies Inc., and Ericsson Inc.*, Memorandum and Order, FCC 98-223, released September 11, 1998.

The Commission should reject DOJ's strained reading of Section 107. The better description of the Section 107(b) factors is provided by Congress itself:

In taking any action under this section, the FCC is directed to protect privacy and security of communications that are not the targets of court-ordered electronic surveillance and to serve the policy of the United States to encourage the provision of new technologies and services to the public.<sup>10</sup>

Thus, if a capability cannot be provided in a way that protects the privacy of communications not otherwise authorized to be intercepted, minimizes the cost of such compliance on residential ratepayers and serves the policy of the United States to encourage the provision of new technologies and services to the public, it need not be provided at all.

DOJ argues, however, that the Commission may not "adopt technical standards that stop short of 'meeting the assistance capability requirements of section 103.'"<sup>11</sup> In so doing, DOJ ignores the express language of Section 107(b)(1), which provides that the Commission must "meet the assistance capability requirements of section 103 by cost-effective methods."

To be clear, Section 107(b)(1) means that if the capability cannot be provided in a cost-effective method, it need not be provided at all. Thus, if a service or technology cannot reasonably be brought into compliance with CALEA's interception requirements while meeting the other Section 107(b) factors, the service or technology can be deployed in any case.<sup>12</sup>

**B. The Entire Cost of JSTD-025 Must Be Considered.**

In light of the above, the Commission was correct to ask, at a minimum, for information regarding the costs and consequences of adding each punch list feature to the industry standard.<sup>13</sup> But, as AT&T pointed out in its FNPRM Comments, the costs and

---

<sup>10</sup> House Report at 3507.

<sup>11</sup> DOJ FNPRM Comments at 12.

<sup>12</sup> House Report at 3507.

<sup>13</sup> FNPRM at ¶ 30.

consequences to carriers, and ultimately to their customers, of CALEA compliance results from more than mere implementation of the punch list capabilities. Instead, the Commission must consider the total costs and consequences of CALEA compliance, including those associated with implementation of JSTD-025.<sup>14</sup> DOJ contends, however, that the costs of complying with JSTD-025 need not be considered because they are "fixed" and that only the incremental costs of implementing the punch list capabilities are relevant.<sup>15</sup>

Section 107 itself defines the scope of the Commission's cost-efficiency inquiry: "the Commission [must] establish, by rule, technical requirements or standards" that satisfy the Section 107(b) factors. The Commission's final rule will incorporate and amend JSTD-025.<sup>16</sup> Thus, it is the Commission's final rule that must be cost-efficient, not just the features DOJ desires to add.<sup>17</sup>

To that end, in the initial comments in this proceeding, many carriers submitted price information regarding their costs of implementing JSTD-025.<sup>18</sup> The comments disclose that compliance will cost industry probably in excess of \$4 billion for the core elements of JSTD-025 alone. As AT&T noted, AWS alone will incur costs of almost \$40 million.

DOJ suggests that the Commission cannot rely on the data submitted by carriers to the Commission, contending that carriers have an "obvious incentive to maximize the claimed

---

<sup>14</sup> The Commission did not, however, request cost information regarding implementation of JSTD-025. AT&T FNPRM Comments at 29.

<sup>15</sup> DOJ FNPRM Comments at 17.

<sup>16</sup> AT&T FNPRM Comments at 29.

<sup>17</sup> In any event, the Commission certainly could conclude on the record before it that the industry standard alone is the most cost-efficient implementation alternative to adding punch list items. This is not to say that the standard is reasonably achievable under Section 109 for all carriers. Any carrier, based on a host of factors including the cost of implementation and the effect on subscriber rates and competition, may seek relief from the Commission under Section 109 based on its own individual circumstances.

<sup>18</sup> See Appendix A. It is unclear to AT&T whether the Commission received data from manufacturers pursuant to request for confidential treatment.



costs of implementing CALEA . . . and to minimize [its] professed ability to meet those requirements in a cost-effective manner."<sup>19</sup> This contention is absurd.

First, AT&T, and other carriers, can only rely on the price information it receives from its vendors. It has no reason to believe that prices it has been quoted for implementation of JSTD-025 are false or overstated. To be sure, the prices are high, but a quick comparison of the comments filed by diverse carriers quoting prices from multiple vendors indicates a fairly consistent product cost of between \$350,000-500,000 per switch.

Second, DOJ has the manufacturer price information in its possession and is the only party to these proceedings with an ability to match up carrier costs with vendor charges. That information should be on the public record because, as Congress stated in regard to Section 107(b) proceedings:

This section is also intended to add openness and accountability to the process of finding solutions to intercept problems. Any FCC decision on a standard for compliance with this bill must be made publicly.<sup>20</sup>

AT&T understands from the Cellular Telecommunications Industry Association ("CTIA") FNPRM Comments that DOJ itself has been offered a major discount – perhaps as much as 40% -- by certain manufacturers for a nation-wide buy out of CALEA solutions.<sup>21</sup> Thus, the idea that carriers will inflate costs in their comments when DOJ has that information in its possession and can easily compare the amounts is ludicrous.

It is also noteworthy that cost data for the punch list was not provided by any party. This is not the fault of the carriers. Only DOJ is in possession of the individual and aggregate manufacturer data regarding the punch list cost. However, it has refused to provide this cost

---

<sup>19</sup> DOJ FNPRM Comments at 17.

<sup>20</sup> House Report at 3507.

<sup>21</sup> Comments of the Cellular Telecommunications Industry Association Regarding Further Notice Of Proposed Rulemaking ("CTIA FNPRM Comments") at 11.

information to the Commission.<sup>22</sup> Although DOJ claims the information in its possession is subject to nondisclosure agreements, it has not produced those agreements in this proceeding so that the Commission can determine whether the agreements in fact preclude such disclosure.<sup>23</sup> Indeed, CTIA stated in its comments that the FBI in fact had sought and obtained permission to disclose such data to Congress and that the agreements permitted disclosure in the aggregate.<sup>24</sup>

Thus, based on the record before it, the only cost-efficient implementation of CALEA is the one that the Commission has cost information about – the core of JSTD-025. Based on the record before it, the Commission cannot make the necessary findings under Section 107(b) regarding any of the punch list items.

## **II. REASONABLE TIME AND CONDITIONS FOR COMPLIANCE**

Pursuant to Section 107(b)(5), DOJ no longer objects to remand of any JSTD-025 changes the Commission requires, provided the Commission imposes certain safeguards to ensure expeditious implementation.<sup>25</sup> DOJ threatens that the Commission will be "exposed to a legal challenge" if it fails to adopt DOJ's conditions for JSTD-025 amendment.<sup>26</sup> Implicit in DOJ's position is the suggestion that the standards setting effort somehow proceeded in bad faith. This suggestion lacks merit. The very fact that only five of the FBI's 11 original punch list items were even tentatively accepted by the Commission and two others were rejected by

---

<sup>22</sup> DOJ laments that it only obtained *price* information from certain manufacturers instead of *costs*. DOJ FNPRM Comments at 16. The significance of this distinction is lost on AT&T because Section 106 of CALEA clearly and unambiguously requires manufacturers to make available CALEA compliant equipment in a timely manner and at a "reasonable charge." 47 U.S.C. § 1005(b). The manufacturer's cost of producing the equipment is no more relevant to the FBI than it is to the carrier, which will pay the invoice amount or price charged by its vendor.

<sup>23</sup> DOJ FNPRM Comments at 16 ("The NDAs permit disclosure in limited circumstances, but none of those circumstances appears to apply here.") (emphasis added).

<sup>24</sup> CTIA FNPRM Comments at 6-7.

<sup>25</sup> DOJ FNPRM Comments at 30-34.

<sup>26</sup> DOJ FNPRM Comments at 30.

DOJ itself as beyond the scope of CALEA is proof positive of the good faith and judicious caution of the drafters of the industry standard.

AT&T continues to support remand of changes to the standard to the TR45.2 subcommittee. However, AT&T disagrees with the DOJ proposal to then preempt the standards setting process by derailing the ballot and review procedures of the Telecommunications Industry Association ("TIA").<sup>27</sup> The TIA procedures are critical to ensuring consensus on the final standard and uniform industry-wide implementation.

DOJ's position seems to be premised on the requirement that the Commission establish standards by rule under Section 107. But no one in these proceedings disagrees that the Commission should determine the scope of Section 103's assistance capability requirements and announce any resulting requirements by rule. AT&T urged in its FNPRM Comments, for example, that the Commission establish the requirements in terms of broad principles so that industry could bring its expertise and practical experience to bear in setting standards to implement the requirements.<sup>28</sup>

Indeed, Section 107(b) provides that the Commission must announce by rule "technical requirements or standards." DOJ does not explain why technical requirements framed as general principles so that a standards organization can develop more detailed specifications constitutes an unlawful delegation.<sup>29</sup> Indeed, Congress delegated the task of developing detailed standards to implement the Section 103 *assistance capability requirements* to industry in the first instance.

DOJ worries that remanding any changes to TR45.2 creates a risk of delay that may prejudice timely implementation of CALEA.<sup>30</sup> DOJ asks for strict adherence to the 180 days

---

<sup>27</sup> DOJ FNPRM Comments at 31.

<sup>28</sup> AT&T FNPRM Comments at 23-24.

<sup>29</sup> DOJ FNPRM Comments at 32.

<sup>30</sup> DOJ FNPRM Comments at 32.

proposed by the Commission to complete the technical work and to not allow any associated ballot process.<sup>31</sup> Yet, as TIA explained in its FNPRM Comments, balloting is required to validate the final standard for international and domestic recognition.<sup>32</sup> AT&T fully supports the standards process as necessary to ensure industry-wide implementation.

DOJ has embraced the industry proposal that the Commission consider assigning a staff observer to the standards process.<sup>33</sup> Industry is proud of its work in preparing JSTD-025 and the standards process is open for good reason. An observer would permit the Commission to track progress and obtain first-hand knowledge of the cause if, for any reason, there is unforeseen or unavoidable delay in the standards process.<sup>34</sup>

Finally, AT&T supports the DOJ proposal to set a new compliance date 18 months after any amended standard is promulgated.<sup>35</sup>

### **CONCLUSION**

AT&T urges the Commission to complete a thorough review of all of the costs associated with CALEA compliance. Proper application of the Section 107(b) factors should lead the Commission to endorse implementation of JSTD-025 without change irrespective of

---

<sup>31</sup> DOJ FNPRM Comments at 33.

<sup>32</sup> TIA FNPRM Comments at 10-20.

<sup>33</sup> DOJ FNPRM Comments at 33.

<sup>34</sup> Needless to say, AT&T opposes, and the Commission should reject, DOJ's proposal that if any delay occurs in the process, the Commission should announce now that it will accept DOJ's proposed rule as the final standard. DOJ FNPRM Comments at 33.

<sup>35</sup> DOJ FNPRM Comments at 29.

its substantive legal conclusions on the scope of Section 103's assistance capability requirements. If any changes to the standard are required, AT&T continues to support remand to TR45.2 with Commission approval for a proper and complete standards development effort.

Respectfully submitted,  
AT&T Corp.

By Stephen C. Garavito

Mark C. Rosenblum  
Stephen C. Garavito  
AT&T Corp.  
Room 3252G1  
295 North Maple Avenue  
Basking Ridge, New Jersey 07920  
(908) 221-8100

Douglas I. Brandon  
Roseanna DeMaria  
AT&T Wireless Services, Inc.  
Fourth Floor  
1150 Connecticut Avenue  
Washington, D.C. 20036  
(202) 223-9222

January 27, 1999

## **APPENDIX A**

### **COST INFORMATION FROM COMMENTS**

<b>Airtouch</b>	100-300K per switch for software
<b>Ameritech</b>	\$69M
<b>AT&amp;T Wireless</b>	\$22M for switch upgrades; \$14M for delivery function; \$1.5M annual maintenance fee.
<b>Bell Atlantic</b>	\$15M for software
<b>Bell South</b>	\$388M across all operating companies
<b>GTE</b>	\$400M across its operating companies
<b>Nextel</b>	\$7-10M for interconnect software solution
<b>US Cellular</b>	\$5.4M
<b>USTA</b>	\$2.2-3.1 Billion for its members

**CERTIFICATE OF SERVICE**

I, Terri Yannotta, do hereby certify that on this 27<sup>th</sup> day of January, 1999, a copy of the foregoing "Reply Comments of AT&T Corp. Regarding Further Notice of Proposed Rulemaking On CALEA Capabilities" was mailed by U.S. first class mail, postage prepaid, to the parties listed on the attached service list:



Terri Yannotta

January 27, 1999

## **SERVICE LIST**

### **Public Notice Petitioners:**

#### **Lucent Technologies, Inc.**

Dean Grayson  
Corporate Counsel  
1825 "Eye" Street, NW  
Washington, DC 20006  
(202) 756-7090

#### **Ericsson Inc.**

Catherine Wang  
Swidler & Berlin  
3000 "K" Street, NW  
Suite 300  
Washington, DC 20007  
(202) 424-7837

#### **Federal Bureau of Investigation**

The Honorable Louis J. Freeh  
Director  
Federal Bureau of Investigation  
J. Edgar Hoover Building  
935 Pennsylvania Avenue, NW  
Washington, DC 20535

Larry R. Parkinson  
General Counsel  
Federal Bureau of Investigation  
935 Pennsylvania Ave, NW  
Washington, DC 20535

H. Michael Warren, Section Chief  
CALEA Implementation Section  
Federal Bureau of Investigation  
14800 Conference Center Drive, Suite 300  
Chantilly, VA 22021

#### **Department of Justice**

The Honorable Janet Reno  
Attorney General  
US Department of Justice  
Constitution Ave. & 10<sup>th</sup> Street, NW  
Washington, DC 20530

Donald Remy  
Deputy Assistant Attorney General  
Civil Division  
US Department of Justice  
601 D Street, NW  
Washington, DC 20530

Douglas N. Letter  
Appellate Litigation Counsel  
Civil Division  
US Department of Justice  
601 D Street, NW  
Washington, DC 20530

#### **Cellular Telecommunications Industry Association**

Nextel  
AT&T  
Albert Gidari  
Perkins Coie LLC  
1201 Third Avenue  
40th Floor  
Seattle, WA 98101  
(206) 583-8688

#### **Commenting Parties:**

##### **360° Communications Company**

Kevin C. Gallagher  
Senior Vice President -- General  
Counsel and Secretary  
360° Communications Company  
8725 W. Higgins Road  
Chicago, IL 60631  
(773) 399-2348

##### **AirTouch Communications, Inc.**

Pamela Riley  
David A. Gross  
AirTouch Communications, Inc.  
1818 N Street NW, Suite 800  
Washington, DC 20036  
(202) 293-3800



Michael W. Mowery  
AirTouch Communications, Inc.  
2999 Oak Road, MS 1025  
Walnut Creek, CA 95596  
(510) 210-3804

**Aliant Communications, Inc.**

Elaine Carpenter  
Aliant Communications, Inc.  
1440 M Street  
Lincoln, NE 68508  
(402) 436-4282

**Alltel Communications, Inc.**

Glenn S. Rubin  
Federal Regulatory Counsel  
ALLTEL Corporate Services, Inc.  
655 15<sup>th</sup> Street, NW  
Suite 220  
Washington, D.C. 20005  
(202) 783-3976

**Association for Local Telecommunications  
Services (ALTS)**

Richard J. Metzger  
Emily M. Williams  
Association for Local Telecommunications Services  
888 17<sup>th</sup> Street NW, Suite 900  
Washington, D.C. 20006  
(202) 969-2583

**Ameritech Corporation**

Barbara J. Kern  
Counsel  
Ameritech Corporation  
2000 Ameritech Center Drive  
Room 4H74  
Hoffman Estates, IL 60196  
(847) 248-6077

**Bell Emergis – Intelligent Signalling  
Technologies**

Gerald W. Fikis  
Group Leader – Technology & Business Line  
Management  
Bell Emergis – Intelligent Signalling Technologies  
Suite 412  
78 O'Connor Street  
Ottawa, ON Canada K1P 3A4  
(613) 781-7293

**BellSouth Cellular Corp.**

Michael P. Goggin  
1100 Peachtree Street, NE, Suite 910  
Atlanta, GA 30309-4599  
(404) 249-0919

**BellSouth Corporation**

M. Robert Sutherland  
Theodore R. Kingsley  
1155 Peachtree Street, NE, Suite 1700  
Atlanta, GA 30309-3610  
(404) 249-3392

**BellSouth Telecommunications, Inc.**

J. Lloyd Nault, II  
4300 BellSouth Center  
675 West Peachtree Street, NE  
Atlanta, GA 30375  
(404) 335-0737

**BellSouth Personal Communications, Inc.**

Thomas M. Meiss  
3353 Peachtree Road, NE  
Suite 400  
Atlanta, GA 30326  
(404) 841-2017

**BellSouth Wireless Data, LP**

Michael W. White  
10 Woodbridge Center Drive, 4<sup>th</sup> Floor  
Woodbridge, NJ 07095-1106  
(732) 602-5453

**Cellular Telecommunications  
Industry Association**

Michael Altschul  
Vice President and General Counsel  
Randall S. Coleman  
Vice President, Regulatory Policy  
& Law  
Cellular Telecommunications  
Industry Association  
1250 Connecticut Ave., NW, Suite 200  
Washington, DC 20036  
(202) 785-0081

**Center for Democracy and Technology**

Jerry Berman, Executive Director  
James X. Dempsey, Senior Staff Counsel  
Center for Democracy and Technology  
1634 Eye Street, NW, Suite 1100  
Washington, DC 20006  
(202) 637-9800

Martin L. Stern  
Michael J. O'Neil  
Preston Gates Ellis & Rouvelas Meeds LLP  
1735 New York Avenue, NW Suite 500  
Washington, DC 20006  
(202) 628-1700

Ernest D. Miller  
Yale Law & Technology Society  
Yale Law School  
127 Wall Street  
New Haven, CT 06520

**Centennial Cellular Corp.**

James F. Ireland  
Theresa A. Zeterberg  
Attorneys  
Cole, Raywid & Braverman, LLP  
1919 Pennsylvania Avenue NW  
Suite 200  
Washington, D.C. 20006  
(202) 659-9750

**CenturyTel Wireless, Inc.**

Susan W. Smith  
Director – External Affairs  
CenturyTel Wireless, Inc.  
3505 Summerhill Road  
No. 4 Summer Place  
Texarkana, TX 75501  
(903) 792-3499

**GTE Service Corporation and its affiliated  
telecommunications companies**

John F. Raposa  
Richard McKenna  
GTE Service Corporation  
600 Hidden Ridge, HQE03J36  
Irving, TX 75038  
(972) 718-6969

Gail L. Polivy  
GTE Service Corporation  
1850 M Street, NW  
Suite 1200  
Washington, DC 20036  
(202) 463-5214

**ICG Telecom Group, Inc.**

Catherine Wang  
Swidler & Berlin Chtd.  
3000 K Street NW  
Suite 300  
Washington, D.C. 20007  
(202) 424-7837  
(202) 424-7645 (fax)

**Liberty Cellular, Inc.**

David L. Nace  
B. Lynn F. Ratnavale  
Attorneys  
Lukas, Nace, Gutierrez & Sachs Chartered  
1111 19<sup>th</sup> Street, NW, Suite 1200  
Washington, DC 20036  
(202) 857-3500

**National Telephone Cooperative Association**

L. Marie Guillory  
Jill Canfield  
2626 Pennsylvania Avenue, NW  
Washington, DC 20037  
(202) 298-2359 (Guillory)  
(202) 298-2326 (Canfield)  
(202) 298-2300

**Nextel Communications, Inc.**

**Corporate Counsel, Regulatory:**

Joel M. Margolis  
1505 Farm Credit Drive  
Suite 100  
McLean, VA 22102  
(703) 394-3000

**Northern Telecom, Inc.**

Stephen L. Goodman  
William F. Maher, Jr.  
Halprin, Temple, Goodman & Sugrue  
1100 New York Avenue, NW  
Suite 650, East Tower  
Washington, DC 20005  
(202) 371-9100

**Of Counsel:**

Frank X. Froncek  
Northern Telecom, Inc.  
4001 East Chapel Hill-Nelson Highway  
Research Triangle Park, NC 27709-3010

**Omnipoint Communications, Inc.**

Emilio W. Cividanes  
Piper & Marbury, LLP  
1200 19<sup>th</sup> Street, NW  
Washington, DC 20036  
(202) 861-3900

**The Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO)**

Stuart Polikoff  
Senior Regulatory and Legislative Analyst  
Lisa M. Zaina  
Vice President and General Counsel  
OPASTCO  
21 Dupont Circle NW  
Suite 700  
Washington, DC 20036  
(202) 659-5990

**Paging Network, Inc.**

Judith St. Ledger-Roty  
Paul G. Madison  
Kelly Drye & Warren, LLP  
1200 19<sup>th</sup> Street, NW, Suite 500  
Washington, DC 20036  
(202) 955-9600

**Personal Communications Industry Association**

**Also counsel for GTE:**

Eric W. DeSilva  
Stephen J. Rosen  
Daniel J. Smith  
Wiley, Rein & Fielding  
1776 K Street, NW  
Washington, DC 20006  
(202) 429-7000

Mary McDermott  
Senior Vice President/  
Chief of Staff for Government Relations  
Todd Lantor  
Manager, Government Relations  
Personal Communications Industry  
Association  
500 Montgomery Street, Suite 700  
Alexandria, VA 22314-1561  
(703) 739-0300

**Powertel, Inc.**

Jill F. Dorsey  
General Counsel/Vice President  
Powertel, Inc.  
1233 O.G. Skinner Drive  
West Point, GA 31833  
(706) 645-2000

**PrimeCo Personal Communications, L.P.**

William L. Roughton, Jr.  
Associate General Counsel  
PrimeCo Personal Communications, L.P.  
601 13<sup>th</sup> Street, NW, Suite 320 South  
Washington, DC 20005  
(202) 628-7735

**Rural Cellular Association (RCA)**

Marci Greenstein  
Sylvia Lesse  
Attorneys  
Kraskin, Lesse & Cosson, LLP  
2120 L Street, NW, Suite 520  
Washington, DC 20037  
(202) 296-8890

**SBC Communications Inc.**

Robert M. Lynch  
Roger K. Toppins  
Hope Thurrott  
One Bell Plaza, Room 3023  
Dallas, TX 75202  
(214) 464-3620

**Southern Communications Services, Inc.**

Carole C. Harris  
Christine M. Gill  
Anne L. Fruehauf  
McDermott, Will & Emery  
606 Thirteenth St., NW  
Washington, DC 20005  
(202) 756-8000

**Sprint Spectrum L.P. d/b/a Sprint PCS**

Joseph R. Assenzo  
Attorney for Sprint Spectrum LP d/b/a Sprint PCS  
4900 Main St., 12<sup>th</sup> Floor  
Kansas City, MO 64112  
(816) 559-2514

**Telecommunications Industry Association**

Grant Seiffert  
Director of Government Relations  
Matthew J. Flanigan  
President  
Telecommunications Industry Association  
1300 Pennsylvania Avenue, NW  
Suite 350  
Washington, DC 20004  
(202) 383-1483

Stewart A. Baker  
Thomas M. Barba  
Brent H. Weingardt  
L. Benjamin Ederington  
Steptoe & Johnson LLP  
1330 Connecticut Avenue, NW  
Washington, DC 20036  
(202) 429-3000

**U S West, Inc.**

Kathryn M. Krause  
Edward M. Chavez  
Dan L. Poole, Of Counsel  
1020 19<sup>th</sup> Street, NW  
Washington, DC 20036  
(303) 672-2859

William T. Lake  
John H. Harwood II  
Lynn R. Charytan  
Todd Zubler  
Wilmer, Cutler & Pickering  
2445 M St. NW  
Washington, DC 20037-1420  
(202) 663-6000

**United States Cellular Corporation**

Peter M. Connolly  
Koteen & Naftalin, LLP  
1150 Connecticut Ave., NW  
Washington, DC 20036

**United States Telephone Association**

Lawrence E. Sarjeant  
Linda L. Kent  
Keith Townsend  
John W. Huner  
1401 H Street, NW, Suite 600  
Washington, DC 20005-2164  
(202) 326-7248

**Alliance for Telecommunication Industry Solutions**

1200 G Street, N.W., Suite 500  
Washington, D.C. 20005

**Americans for Tax Reform**

James P. Lucier, Jr., Dir. of Economic Research  
1320 18<sup>th</sup> St., N.W., Suite 200  
Washington, D.C. 20036

**Free Congress Foundation**

Lisa S. Dean  
Director, Center for Technology Policy  
717 Second St., N.E.  
Washington, D.C. 20002

**Citizens for a Sound Economy**

Anita Sheth, Director, Regulatory Policy Studies  
1250 H Street, N.W., Suite 700  
Washington, D.C. 20005

**Policy Department, City of New York**

John Pignatato  
Sergeant Detective Supervisor  
Electronic Surveillance Technical Advisor  
New York City Police Department  
Fort Totten, Building 610  
Bayside, NY 11359  
(718) 971-1408

Edward T. Norris  
Deputy Commissioner, Operations  
New York City Police Department  
1 Police Plaza, Room 910  
New York, NY 10038  
(212) 374-6100

**Attorneys for EPIC, EFF and the ACLU**

Kurt A. Wimmer, Mark Porada, Alane Weixel  
Covington & Burling  
1201 Pennsylvania Ave., N.W.  
P.O. Box 7566  
Washington, D.C. 20044-7566  
(202) 662-6000

Mark Emery  
Technical Consultant  
3032 Jeannie Anna Court  
Oak Hill, VA 20171

**Bell Atlantic**

John M. Goodman  
1300 Eye Street, N.W.  
Washington, D.C. 20005  
(202) 336-7874

**ICO Global Communications**

Francis Coleman  
Director of Regulator Affairs North America  
ICO Global Communications  
1101 Connecticut Avenue, N.W.  
Suite 550  
Washington, D.C. 20036  
(202) 887-8111

**Counsel for ICO Services Limited:**

Cheryl A. Tritt  
James A. Casey  
Morrison & Foerster, LLP  
2000 Pennsylvania Ave., N.W.  
Suite 5500  
Washington, D.C. 20006  
(202) 887-1500

**American Mobile Satellite Corporation**

Colette M. Capretz  
Fisher Wayland Cooper, et al.  
2001 Pennsylvania Ave. N.W.  
Suite 400  
Washington, D.C. 20006  
(202) 659-3494

Lon C. Levin  
Vice President and Regulatory Counsel  
American Mobile Satellite Corporation  
10802 Park Ridge Blvd.  
Reston, VA 20191  
(703) 758-6000

**Metricom**

**Counsel for Metricom:**

Henry Rivera, J. Thomas Nolan  
Larry Solomon  
Shook, Hardy & Bacon, LLP  
1850 K Street, N.W., Suite 900  
Washington, D.C. 20006  
(202) 452-1450